



BOILER SAFETY INTERPRETATION/TECHNICAL LETTER  
BSI17

MEMORANDUM

TO: All Inspection Companies

FROM: Fred P. Barton, Director/Chief Inspector  
Boiler Safety Compliance Program

SUBJECT: Hobby Boilers

DATE: December 5, 2001

On July 29, 2001 a Steam Tractor Engine (Hobby Boiler) in Medina, Ohio exploded killing five (5) and wounding forty-eight (48).

An extensive investigation of the boiler explosion has resulted in a finding of the failure of the crown sheet. The weakest point in the crown sheet was .087 inches which is only 23% of the original thickness, .375 inches. In addition, many staybolts in the crown sheet area were deteriorated and had as low as 1.5 threads of engagement.

Section 40.1-51.19:3 of the Virginia Code only addresses ultrasonic examination for metal thickness at the initial inspection. The requirements of subsequent inspections are listed in Section 40.1-51.19:3(B) and include checking for internal corrosion.

All Inspectors are requested to inspect the crown sheet area of Hobby Boilers at the next required internal inspection. Checking thicknesses of crown sheets and appropriate staybolts is also recommended.

We all know how important a crown sheet is in the safe operation of a Hobby Boiler. Your vigilance in checking this area is needed.

Please advise the writer if you have any questions on this matter.

FPB/fs